Update on the American Recovery and Reinvestment Act

Focus on Energy Efficiency, Conservation and Renewable Energy

Energy

Energy Efficiency and Conservation

- \$3.2 billion (\$2.8b by formula and \$400m competitive) for reduction of fossil fuel emissions, improving energy efficiency in transportation and building, financial incentives for retrofits
- \$12.5 award for City of San Diego
- Continuing program with future awards similar to JAG, CDBG and ESG

Advanced Energy Credit (Tax Credits)

- 30% investment tax credit for a qualified advanced energy project
- Expected to boost the region's emerging clean tech cluster

Clean Renewable Energy Bonds

- \$1.6 billion authorization for bonds dedicated to financing facilities that generate electricity from renewable sources
- 1/3 for State/local govt., 1/3 for public power providers, and 1/3 for electric cooperatives

Energy

- Qualified Energy Conservation Bonds
 - \$2.4 billion authorization for state and local initiatives to reduce greenhouse gas emissions
 - Complementary to the City's AB 811 program
 - Still waiting on program design
- Energy-Efficient Improvements (Tax Credits)
 - 30% tax credit for improvements to existing homes to improve energy efficiency
 - Complementary to the City's AB 811 program

Energy Funding Overview

Weatherization Assistance \$ 5.0 B

State Energy Program \$ 3.1 B

EECBG Program Formula \$ 2.8 B

City of San Diego \$12.4 M

EECBG Competitive \$ 400 M

Appliance Rebate Program \$ 300 M

Eligible Uses of Funds

- Primarily for energy efficiency and energy conservation
- Community-wide; not just municipal buildings and facilities
 - Don't have to do capital *projects*, can do *programs*
 - Prioritize activities that pay dividends year after year
- Funds must be obligated within 18 months, expended within 36
- 1. Strategy Development
- 2. Building Energy Audits & Retrofits
- 3. Financial Incentive Programs
- 4. Energy Efficiency and Conservation Programs for Buildings and Facilities
- 5. Development and Implementation of Transportation Programs
- **6. Building Codes and Enforcement**
- 7. Energy Distribution Technologies for EE including CHP & district heating and cooling

- 8. Material Conservation Programs including source reduction, recycling, and recycled content procurement programs
- 9. Reduction and Capture of Methane and Greenhouse Gases
- 10. Traffic Signals and Street Lighting
- 11.Renewable Energy Technologies on Government Buildings
- **12.**Any Other Appropriate Activity

Residential and Commercial Building Energy Audits

- Fund city-wide residential energy efficiency audit program
- Provide small business audit and retrofit initiative
- Point-of-sale audit requirement
- Conduct benchmarking using tools such as Portfolio Manager



Financial Incentive Programs

- Create a revolving loan fund*
- Amortize loans over long time periods
- Buy down interest rates
- Reduce costs through aggregation
- Provide on-bill financing
- Use Energy Saving Performance Contracts

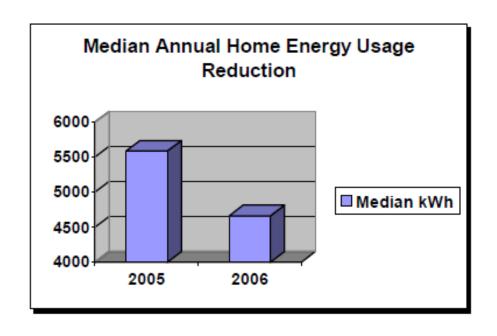


City of Ann Arbor Municipal Energy Fund

*Cost cap for local governments: Greater of 20% or \$250,000

Energy Efficiency Retrofits

- Fund residential, commercial, industrial, or local government energy efficiency facility retrofits
- Implement energy service company retrofit recommendations
- Conduct re-commissioning
- Conduct building retrofit training, including usage of diagnostic equipment, to identify areas of improvement, enhance maintenance practices, and identify new technologies



City of Houston
Pleasantville Weatherization
Program

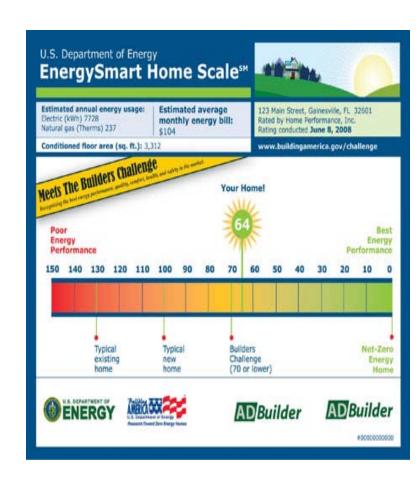
Energy Efficiency and Conservation Program for Buildings and Facilities

- Initiate a neighborhood greenenergy efficiency retrofit program for residents and local businesses;
- Provide free retrofits to low and moderate income residents and small businesses utilizing retrained displaced workers;
- Establish high performance building practices;
- Improve coordination of energyrelated policies;
- Leverage HUD and DOE utility low income & Weatherization programs.



Building Codes and Inspections to Promote Building Energy Efficiency

- Develop and implement building codes and inspection services to promote building energy efficiency
- Adopt advanced building codes that target energy savings of 30% or higher than current standards
- Provide advanced training to builders and/or installers of materials or systems required by new energy codes
- Promote high performance buildings:
 - Green Buildings
 - US DOE Builders Challenge
 - Net Zero homes



Energy Distribution Technologies

- Technologies that significantly increase energy efficiency
- Build an integrated system within the electricity grid consisting of thermal generation, energy storage, and energy management systems such as combined cooling, heat and power (CHP)
- Install numerous, small stand-alone electricity generators to provide back-up power at designated locations as part of an energy assurance plan
- Develop policies and incentives to implement CHP



Traffic Signals and Street Lighting

- Install and/or replace traffic signals and street lighting with energy efficient lighting technologies, including light emitting diodes; and any other technology of equal or greater energy efficiency;
- Implement traffic light synchronization.



Development or Implementation of On-Site Renewable Energy on Government Buildings

- Develop, implement, and install onsite renewable energy technology that generates electricity from renewable resources, including solar energy; wind energy; fuel cells; and biomass
- Develop a city-wide power purchase agreement for solar/renewable energy installations on all municipal facilities and buildings
- Install renewable energy systems on targeted city facilities—park facilities, libraries, fire stations, etc.



For More Information

- EECBG Solutions Center
 http://www.eecbg.energy.gov/solutioncenter/default.html
- EECBG Program Page http://www.eecbg.energy.gov/
- EERE Recovery Act Activities
 http://www.eere.energy.gov/recovery/
- Weatherization and Intergovernmental Program http://www.eere.energy.gov/wip/